

REMARKS

Claims 1-38 have been examined. Claims 1-2, 15-16, 21-22, and 33-34 have been amended. Claims 1-38 are all the claims pending in the application.

Formal matters

Applicant thanks the Examiner for accepting the drawings filed on April 9, 2004, and for acknowledging claim to foreign priority and receipt of a certified copy of the priority document.

The Examiner has objected to the specification because it contains embedded hyperlink and/or other forms of browser-executable code. Applicant has amended the specification and respectfully requests the Examiner to remove the objection.

The Examiner has objected to the title of the invention as non-descriptive. Applicant has amended the title as suggested by the Examiner and respectfully requests the Examiner to remove the objection.

Information Disclosure Statements

Applicant thanks the Examiner for reviewing and initialing the foreign patent documents listed in the Information Disclosure Statement submitted on December 1, 2003, but notes that the Examiner has not initialed the non-patent literature document disclosed therein. Thus, Applicant respectfully requests the Examiner to initial this document as reviewed in the next Office Action.

With respect to the June 6, 2005 IDS, the Examiner indicates that the IDS has not been considered because the IDS is allegedly non-compliant. Specifically, the Examiner maintains that the references are non-English language documents, and no translated copy of the

documents, or portion thereof, has been provided. However, Applicant respectfully submits that the June 6, 2005 IDS is in full compliance with the requirements of 37 C.F.R. § 1.98(a)(3)(ii).

Applicant directs the Examiner to the last sentence of 37 C.F.R. § 1.98(a)(3)(i) which states: "The concise explanation may be either separate from applicant's specification or incorporated therein." Applicant further directs the Examiner to page 2 of the IDS where a concise explanation of the relevance of the foreign language documents is offered. Specifically, page 2 of the IDS states that "Applicant encloses herewith a copy of a corresponding Taiwanese Office Action dated March 11, 2005 and an English translation of the pertinent portions thereof which cites such documents and indicates the degree of relevance found by the foreign office."

Applicant notes MPEP § 609.05(c), which in pertinent part states:

Information which complies with requirements as discussed in this section but which is in a non-English language will be considered in view of the concise explanation submitted and insofar as it is understood on its face, e.g., drawings, chemical formulas, in the same manner that non-English language information in Office search files is considered by examiners in conducting searches. The examiner need not have the information translated unless it appears to be necessary to do so. The examiner will indicate that the non-English language information has been considered in the same manner as consideration is indicated for information submitted in English. The examiner should not require that a translation be filed by applicant. The examiner should not make any comment such as that the non-English language information has only been considered to the extent understood, since this fact is inherent. See *Semiconductor Energy Laboratory Co. V. Samsung Electronics Co.*, 204 F.3d 1368, 1377-78, 54 USPQ2d 1001, 1008 (Fed. Cir. 2000) ("[A]s MPEP Section 609C(2) reveals, the examiner's understanding of a foreign reference is generally limited to that which he or she can glean from the applicant's concise statement. Consequently, while the examiner's initials require that we presume that he or she considered the [foreign] reference, this presumption extends only to the examiner's consideration of the brief translated portion and the concise statement."). (underlined emphasis added).

Applicant further notes that if the Examiner feels that a translation is necessary, the Examiner may call upon the Translation Branch of the Scientific and Technical Information Center, as described at MPEP § 901.06(a):

Examiners may consult the translators in the *>Translations< Branch of **>STIC< for oral assistance in translating foreign language patents and other literature sources that are possible references for applications being examined. Oral translations are performed for the major European languages and for Japanese. Examiners may also request written translations of pertinent portions of references being considered for citation or already cited in applications. Full translations are also made upon request. Written translations can be made from virtually all foreign languages into English. >See also MPEP § 901.05(d).<

There is a computerized database located in the Translations Branch listing all translations which have been made by the Branch, and a few others gathered from miscellaneous sources. This database lists over 30,000 translations of foreign patents and articles, all of which are located in the Translations Branch. Patent translations are indexed by country and patent number; articles are indexed by language and author or title. Any copies of translations coming to examiners from outside the Office should be furnished to the Translations Branch so that it may make copies for its files.

In other words, once Applicant has complied with 37 C.F.R. § 1.98(c)(3), it is not incumbent on Applicant to provide further translation. Since Applicant has complied with 37 C.F.R. § 1.98(c)(3), Applicant respectfully requests the Examiner to give necessary consideration to the references disclosed in the IDS filed June 6, 2005.

Claim objections

Claims 15-16 and 33-34 stand objected to for informalities. Applicant has amended the claims as suggested by the Examiner and respectfully requests the Examiner to remove the objections.

Claim rejections -- 35 U.S.C. § 112

Claims 1-2 and 21-22 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. Specifically, the Examiner maintains that the language “switching said bus” has no antecedent basis in the claims. Applicant has amended the claims and respectfully requests the Examiner to withdraw the rejection.

Claim rejections -- 35 U.S.C. § 103

Claims 1 and 21 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Applicant’s alleged Admitted Prior Art (AAPA) in view of U.S. Patent Application Publication No. 2002/0069317 to Chow. Moreover, claims 2, 15, 17, 19, 22, 33, 35, and 37 stand rejectioned under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of U.S. Patent No. 5, 586,291 to Lasker. Applicant respectfully traverses this rejection.

Claims 1, 2, 21, and 22 recite the feature of the buffer sections each having a buffer circuit for causing the ring bus to operate as the unidirectional bus or the bi-directional bus in accordance with an instruction from the control device. The Examiner maintains that this feature is met by AAPA at Fig. 2 of the specification and its corresponding description at page 2, line 25 to page 3, line 5. However, Applicant respectfully disagrees. As stated at the cited lines, a

RAMLINK system uses a unidirectional bus in which a transmission direction of a signal is fixed in only one direction. Therefore, to achieve bi-directionality between a controller and memory modules, *two* unidirectional buses having opposite transmission directions must be provided.

Thus, the AAPA does not show switching a ring bus from operation as a unidirectional bus to operation as a bi-directional bus. Moreover, the AAPA does not show that buffer circuits cause the ring bus to operate as a unidirectional or bi-directional bus in accordance with an instruction from the control device, as set forth by the claims. Applicant notes that the cited portions of the specification do not mention buffer circuits at all. Neither Chow nor Lasker contain any disclosure relevant to this feature. Therefore, claims 1, 2, 21, and 22 are patentable. Claims 15, 17, 19, 33, 35, and 37 are patentable based on their dependencies.

Claims 5, 8, 16, 18, 20, 23, 26, 34, 36, and 38 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Lasker in view of U.S. Patent No. 6,411,539 to Funaba.

Independent claims 5 and 23 recite the feature of a control device for, in replacing an arbitrary memory module, detecting an address space of said memory module to be replaced, copying data corresponding to the detected address space from said hard disk device to said storage, and accessing a memory area in said storage corresponding to the detected address space at the time when an access to said memory module to be replaced is requested. The Examiner maintains that this feature is met by Lasker at col. 9, lines 38-48. However, Applicant respectfully disagrees.

At the cited lines, Lasker describes that the cache memory control circuit 40 may operate in a “mirror mode”. In the mirror mode, one of the SIMMs duplicates or mirrors the data stored on a different one of the SIMMs. Col. 9, lines 38-43. Then, if one of the SIMMs fails, the non-failing SIMM may be removed and placed into another controller, where the data may be transferred from the non-failing, mirrored SIMM to disk. Col. 9, lines 43-49. Thus, in Lasker, the controller does not transfer data *from* the hard disk device to the storage, as set forth by the claim, but rather transfers in the opposite direction. Moreover, Lasker shows only removing the non-failed, mirrored SIMM. As such, Lasker does not show accessing a memory area in the storage corresponding to the detected address space of the memory module *to be replaced*, as set forth by the claim. Funaba contains no teachings relevant to either of these points. Thus, independent claims 5 and 23 are patentable over the AAPA, Lasker and Funaba combination. Claims 8, 16, 18, 20, 26, 34, 36, and 38 are patentable based on their dependencies.

Claims 3, 6, and 24 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Chow in further view of Funaba. Claims 4, 7, and 25 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Lasker in further view of Funaba. Claims 9 and 27 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Chow and Funaba in further view of U.S. Patent No. 6,487,623 to Emerson. Claims 10 and 28 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Lasker and Funaba in further view of Emerson. Claims 11 and 29 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Lasker and Funaba in further view of Emerson. Claims 12 and 30 stand

rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Chow and Funaba in further view of U.S. Patent Application Publication No. 2002/0083255 to Greeff. Claims 13 and 31 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Lasker and Funaba in further view of Greeff. Claims 14 and 32 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Lasker and Funaba in further view of Emerson.

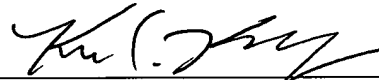
The remaining claims depend from one of the independent claims discussed above. The Examiner has applied Emerson as allegedly teaching that the short-circuit device is a FET switch, and has applied Greeff as allegedly teaching that the short-circuit device is a connector. Thus, neither Emerson nor Greeff cure the deficiencies of the AAPA, Chow, Lasker, and Funaba references in relation to the arguments made above with respect to the various independent claims. As such, the remaining claims are patentable based on their respective dependencies.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Kevin C. Kunzendorf
Registration No. 58,308

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: August 30, 2006